



AUTUMN LEAGUE 2010

COURSE CARD INSHORE COMMITTEE BOAT STARTS



| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|----------------------|------------------------|------------------------------|------------------------------------|--|----------------------------------|------------------------------|
| 00 | Z P W S F | Z W C P W S F | Z W C P W P W C S F | Z W C P C P C S F | Z W C P W P C P S F | Z W C P C P C P W S F | |
| 01 | Z P W C S F | Z P W P W S F | Z P W P W P W C S F | Z P W P C U S F | Z P C U P W P W S F | Z P W P W C U C U S F | |
| 02 | Z P C S F | Z W C U C S F | Z P C U P C S F | Z W C U C U S F | Z W C U P W P W C U S F | Z W C U C U C U S F | |
| 03 | Z W V C S F | Z P W U W S F | Z P W U W C V C S F | Z P W U W U W S F | Z P W U W U W C V S F | Z P W U W U W C V C V C S F | |
| 04 | Z W C H S F | Z H W C H C V C S F | Z W C H C H S F | Z W C H W U W C S F | Z W C H C V C H C V C S F | Z W C H C V C H C V C V C S F | |
| 05 | Z W C V C S F | Z W C O S F | Z W C O I O S F | Z W C V C O W S F | Z W C O C O V S F | Z W C O I O C O S F | |
| 06 | Z W C V C S F | Z W C O S F | Z W C O C S F | Z W C V C O C S F | Z W C O C O S F | Z W C O I O C O S F | |
| 07 | Z W C I C S F | Z W C O S F | Z W C O C I C S F | Z W C O I O V S F | Z W C O C O V S F | Z W C O C O C O S F | Z W C O C O C O V S F |
| 08 | Z V C D C I S F | Z V C D C D C I S F | Z V W O C D C I S F | Z V C K V W O C I S F | Z V W O W O C I S F | Z V W O W O W O C I S F | |
| 09 | Z V C D C I S F | Z V C D C D C I S F | Z V W O C D C I S F | Z V C K V W O C I S F | Z V W O W O C I S F | Z V W O W O W O C I S F | |
| 10 | Z V W I V C S F | Z V W I W I V C S F | Z V W D W D V C S F | Z V W D W I W I V C S F | Z V W D W D W D V C S F | Z V W D W D D W I V C S F | |
| 11 | Z V W I V C S F | Z V W I W I V C S F | Z V W D W D V C S F | Z V W D W I W I V C S F | Z V W D W D W D V C S F | Z V W D W D D W I V C S F | |
| 12 | Z V W I W S F | Z V W I W I V C S F | Z V W D W D V C S F | Z V W D W D W S F | Z V W D W D W I W S F | Z V W D W D I W I V C S F | |
| 13 | Z V D P S F | Z P I V W S F | Z P D P S F | Z V D P D V W S F | Z V D P D V D V W S F | Z V D P D P D V W S F | |
| 14 | Z V P S F | Z V P I P W S F | Z I P I P S F | Z I P V P V P S F | Z V P V P I P S F | Z V P D P D P S F | |
| 15 | Z I P S F | Z I W C I P S F | Z I P I P S F | Z I P V P I W C S F | Z I P V P I P S F | Z I P I P I P S F | Z I P I P V P I P S F |
| 16 | Z V P S F | Z P C W C S F | Z V P C P S F | Z V P C P C W C S F | Z V P C V P I V W C S F | Z P C P C P S F | Z V P C P C V P C P S F |
| 17 | Z I P C S F | Z V P C V W C S F | Z I P C P C S F | Z V P C P C I V S F | Z V P C P C P C S F | Z V P C P C P C I V I V S F | Z V P C P C V P C P S F |
| 18 | Z I P C S F | Z V P W H S F | Z V P W P W V U S F | Z I U I U S F | Z V P C I U I H S F | Z V P C I U I U S F | Z I U I U I V P W P C S F |
| 19 | Z I H S F | Z V P W P W S F | Z V U C U C S F | Z V U C U C V S F | Z V U C U C H S F | Z V U C U C U S F | |
| 20 | Z V U C I S F | Z V H C H C S F | Z V U C H C I S F | Z V U C U C I S F | Z V U C H V U C I S F | Z V U C U C U C S F | Z I U C U C U C I S F |
| 21 | Z I H C S F | Z I H C H V C S F | Z V H C H C V C S F | Z V H C H C H C S F | Z V U W U W V H C S F | Z V H C H C H C H C S F | Z I U C U C U C I S F |
| 22 | Z I H C S F | Z V U W U W S F | Z V H C V C U W S F | Z V U W U W U W S F | Z V H C V C U W U W S F | Z V H C H C U W U W S F | |
| 23 | Z V H W S F | Z V H W H W S F | Z V U W U W S F | Z V H C V C U W S F | Z V U C U C U C S F | Z V H C H C U W U W S F | Z V U W U W U W U W S F |
| 24 | Z V H W S F | Z V H W H W S F | Z V H W O C S F | Z V H W H W O S F | Z V H W O C O S F | Z V H W H W O C O S F | Z V H W H W O C O I S F |
| 25 | Z I D C D Y S F | Z I D C D C D Y S F | Z I O W I D C D Y S F | Z I O W O W I D Y S F | Z I O W O W I D C S F | Z I O W O W I D C D C S F | |
| 26 | Z I D C D C S F | Z I D C D C D Y S F | Z I O W I D C D Y S F | Z I O W O W I D Y S F | Z I O W O W I D C S F | Z I O W O W I D C D C S F | |
| 27 | Z I D C D C S F | Z I D C D C D Y S F | Z I O W I D C D Y S F | Z I O W O W I D Y S F | Z I O W O W I D C S F | Z I O W O W I D C D C S F | |
| 28 | Z C D W S F | Z C D W I W S F | Z C I W I W C I W S F | Z I D W D W C I W S F | Z C D W D W C D W S F | Z I K W C D W C D W S F | |
| 29 | Z C D W S F | Z C D W I W S F | Z C I W I W C I W S F | Z I D W D W C I W S F | Z C D W D W C D W S F | Z I K W C D W C D W S F | |
| 30 | Z C D W S F | Z C D W I W S F | Z C I W I W C I W S F | Z I D W D W C I W S F | Z C D W D W C D W S F | Z I K W C D W C D W S F | |
| 31 | Z C I P S F | Z C I P W C W C S F | Z C I P I P W S F | Z C I P I P W C W S F | Z C I P V P I P S F | Z C I P V P I P V P S F | |
| 32 | Z C I P S F | Z C I P W C W C S F | Z C I P I P S F | Z W C I P I P W C W C S F | Z C I P I P I P S F | Z C I P I P I P I V S F | |
| 33 | Z W C W C W C S F | Z C I P W C W C S F | Z C I P I P S F | Z W C I P I P W C W C S F | Z C I P I P I P S F | Z C I P I P I P I V S F | |
| 34 | Z W C P W C S F | Z C P C W C S F | Z W C P C P C W S F | Z W C P C P C P S F | Z W C P C P C P S F | Z W C P C P C P C P S F | |
| 35 | Z W C P W C S F | Z W C P W C W C S F | Z W C P C P S F | Z W C P C P C W S F | Z W C P C P C P C W S F | Z W C P C P C P C P S F | |
| 40 | Z W g L F | Z W g L Z L F | Z W g L Z L Z W g L F | Z W g L Z L Z W g L Z L F | Olympic Course: Wg = Gybe Mark | | |
| 50 | Z O f L F | Z O f L Z O f L F | Z O f L Z O f L Z O f L F | Z O f L Z O f L O f L Z O f L F | Winward / Leeward Course: Of = Offset Mark | | |

All marks are rounding marks except for those in a (box) which are passing marks
 Marks coloured red shall be rounded/passed to port

Marks coloured green shall be rounded/passed to starboard

Courses were designed with the aid of Soft Touch Programmes

NAVIGATION MARKS AND OBSTRUCTIONS

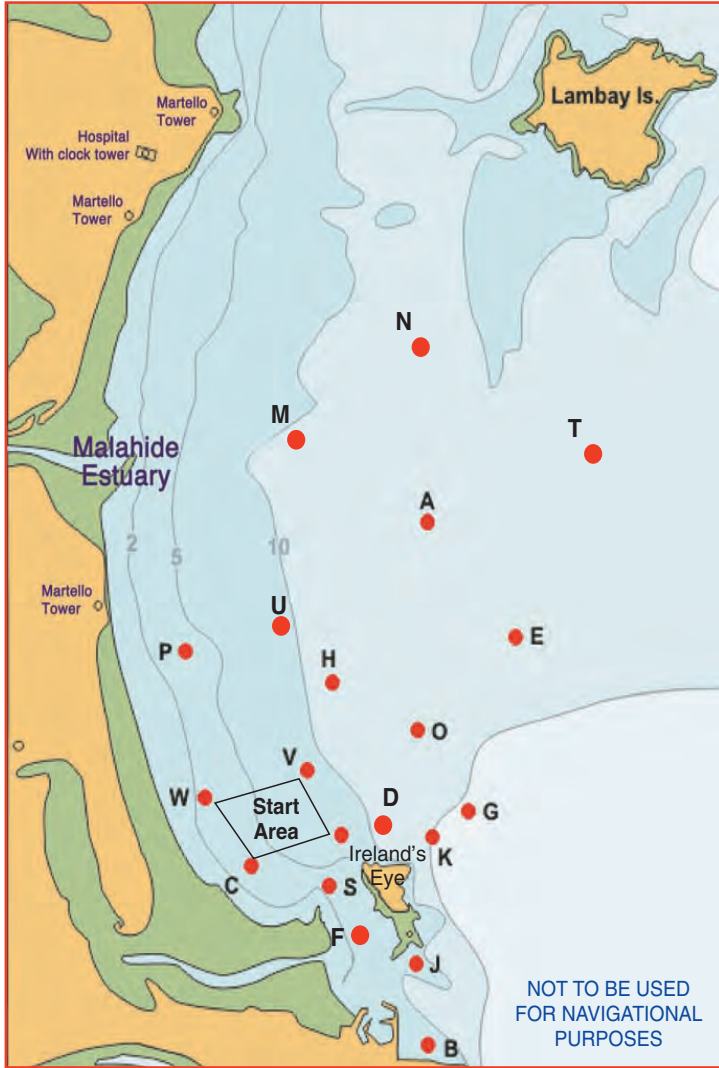
The Navigation Marks in and around Howth Sound shall be left as follows-

South Rowan: to be passed to the West and South
 Rowan Rocks: to be passed to the East and South

Any part of Ireland's Eye capable of being touched by a boat while racing is designated as an obstruction to sea room.

Competitors are reminded of a trawler wreck in Howth Sound, south of the Carrgran Rocks on Ireland's Eye, which is submerged at most stages of the tide.

Boats racing in the vicinity of Baldoyle Spit shall sail North and East of the Spit Mark (S).



RACING MARKS 2010 (APPROXIMATE)

| ID | NAME | SHAPE | COLOUR | DEG | MIN | DEG | MIN |
|----|-------------|-----------|--------|----------------------|-------|-----|-------|
| A | Apex | Conical | Black | 53 | 26.76 | 06 | 03.26 |
| C | Cush | Conical | Black | 53 | 24.50 | 06 | 05.44 |
| D | Dunbo | Conical | Yellow | 53 | 24.73 | 06 | 03.85 |
| H | Hub | Conical | Black | 53 | 25.71 | 06 | 04.43 |
| I | Island | Conical | Black | 53 | 24.70 | 06 | 04.36 |
| K | Stack | Conical | Black | 53 | 24.60 | 06 | 03.11 |
| M | Malahide | Conical | Black | 53 | 27.23 | 06 | 05.59 |
| O | Osprey | Conical | Orange | 53 | 25.41 | 06 | 03.52 |
| P | Portmarnock | Conical | Black | 53 | 25.89 | 06 | 06.30 |
| R | South Rowan | IALA | Green | 53 | 23.78 | 06 | 03.88 |
| S | Spit | Conical | Black | 53 | 24.35 | 06 | 04.48 |
| U | Ulysses | Conical | Orange | 53 | 26.22 | 06 | 04.97 |
| V | Viceroy | Conical | Orange | 53 | 25.12 | 06 | 04.78 |
| W | West | Conical | Black | 53 | 24.96 | 06 | 06.07 |
| X | Xebec | Barrel | Black | 53 | 24.12 | 06 | 04.33 |
| Z | Zephyr | Spherical | Yellow | Upwind of Start Line | | | |

COURSE SELECTION

- 1). Courses will be designated by three numeral boards.
- 2). The first two boards will indicate the beat. ie 07 = 070°
- 3). The third board indicates the column number across the top of the page.
Therefore Course 073 is the third course in from the left on line 07.

TIDES

| | HW | HT. | LW |
|------------------------|-------|------|-------|
| Sunday, September 19th | 09.57 | 3.3m | 15.43 |
| Sunday, September 26th | 13.50 | 3.9m | 07.23 |
| Sunday, October 3rd | 08.08 | 3.3m | 13.55 |
| Sunday, October 10th | 13.51 | 4.3m | 07.16 |
| Saturday, October 16th | 07.13 | 3.0m | 13.01 |

Row 40 & Row 50

| ID | Name | Shape | Colour |
|----|----------|-----------|--------|
| D | Distance | Pillar | Orange |
| Z | Windward | Spherical | Yellow |
| Wg | Wing | Round | Yellow |
| L | Leeward | Round | Orange |
| Of | Offset | Round | Yellow |

2010 Race Marks - Relative Bearings Table - Magnetic (Approx)

| | A | B | C | D | E | G | H | I | J | K | M | N | O | P | Q | S | T | U | V | W |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| A | | 186° | 216° | 196° | 146° | 168° | 220° | 207° | 188° | 184° | 295° | 002° | 192° | 250° | 185° | 203° | 071° | 248° | 215° | 229° |
| B | 006° | | 319° | 352° | 019° | 024° | 350° | 336° | 357° | 010° | 347° | 005° | 002° | 331° | 010° | 331° | 022° | 347° | 340° | 321° |
| C | 036° | 139° | | 084° | 058° | 081° | 032° | 077° | 126° | 092° | 004° | 025° | 058° | 346° | 121° | 111° | 047° | 015° | 038° | 327° |
| D | 016° | 172° | 264° | | 043° | 078° | 347° | 272° | 170° | 110° | 344° | 011° | 023° | 315° | 161° | 233° | 036° | 342° | 312° | 287° |
| E | 326° | 199° | 238° | 223° | | 190° | 264° | 233° | 204° | 207° | 307° | 346° | 238° | 273° | 202° | 225° | 028° | 284° | 246° | 252° |
| G | 348° | 204° | 261° | 258° | 010° | | 305° | 263° | 214° | 236° | 325° | 354° | 306° | 297° | 211° | 249° | 021° | 314° | 281° | 275° |
| H | 040° | 170° | 212° | 167° | 084° | 125° | | 191° | 168° | 151° | 342° | 021° | 125° | 285° | 164° | 187° | 055° | 334° | 205° | 238° |
| I | 027° | 156° | 257° | 092° | 053° | 083° | 011° | | 148° | 101° | 353° | 018° | 048° | 326° | 140° | 177° | 043° | 357° | 350° | 293° |
| J | 008° | 177° | 306° | 350° | 024° | 034° | 348° | 328° | | 018° | 345° | 006° | 004° | 326° | 062° | 317° | 026° | 345° | 334° | 312° |
| K | 004° | 190° | 272° | 290° | 027° | 056° | 331° | 281° | 198° | | 337° | 003° | 350° | 310° | 190° | 259° | 028° | 332° | 304° | 288° |
| M | 115° | 167° | 184° | 164° | 127° | 145° | 162° | 173° | 165° | 157° | | 066° | 152° | 204° | 163° | 173° | 094° | 166° | 173° | 193° |
| N | 182° | 185° | 205° | 191° | 166° | 174° | 201° | 198° | 186° | 183° | 246° | | 187° | 225° | 184° | 196° | 125° | 214° | 202° | 214° |
| O | 012° | 182° | 238° | 203° | 058° | 126° | 305° | 228° | 184° | 170° | 332° | 007° | | 292° | 180° | 215° | 040° | 319° | 256° | 260° |
| P | 070° | 151° | 166° | 135° | 093° | 117° | 105° | 146° | 146° | 130° | 024° | 045° | 112° | | 143° | 151° | 071° | 073° | 136° | 178° |
| Q | 005° | 190° | 301° | 341° | 022° | 031° | 344° | 320° | 242° | 010° | 343° | 004° | 360° | 323° | | 308° | 024° | 342° | 329° | 308° |
| S | 023° | 151° | 291° | 053° | 045° | 069° | 007° | 357° | 137° | 079° | 353° | 016° | 035° | 331° | 128° | | 039° | 357° | 353° | 309° |
| T | 251° | 202° | 227° | 216° | 208° | 201° | 235° | 223° | 206° | 208° | 274° | 305° | 220° | 251° | 204° | 219° | | 249° | 229° | 236° |
| U | 068° | 167° | 195° | 162° | 104° | 134° | 154° | 177° | 165° | 152° | 346° | 034° | 139° | 253° | 162° | 177° | 069° | | 180° | 213° |
| V | 035° | 160° | 218° | 132° | 066° | 101° | 025° | 170° | 154° | 124° | 353° | 022° | 076° | 316° | 149° | 173° | 049° | 000° | | 264° |
| W | 049° | 141° | 147° | 107° | 072° | 095° | 058° | 113° | 132° | 108° | 013° | 034° | 080° | 358° | 128° | 129° | 056° | 033° | 084° | |